

REMARKS

Claims 1-21 were pending at the time of examination. Claims 1-21 have been amended. No new matter has been added. The Applicants respectfully request reconsideration based on the foregoing amendments and these remarks.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 2, 4, 10-11, 14-15 and 19 were rejected under 35 U.S.C § 103(a) as being unpatentable over U.S. Patent No. 6,646,653 to San et al. (hereinafter “San”) in view of U.S. Patent No. 5,331,336 to Kurita et al. (hereinafter “Kurita”). The Applicants respectfully traverse the rejection, but have amended the claims in order to more clearly show the distinctions between the invention and the prior art.

Claims 1-21 have been amended to specifically recite “three-dimensional objects,” instead of “objects”, as originally claimed. Kurita is directed to a digital color copying machine, which has a “unique color-conversion function...so that desired color conversion, particularly outline emphasis, can be realized.” (Kurita, col. 4, lines 43-47). The “input image data” in Kurita, which would correspond to the three-dimensional object in the Applicants’ invention, is a one-dimensional or a two-dimensional image, exemplified by the character “L” (Kurita, Figs. 2A-2F). An outline extracting section extracts an outline of the input image data, and a color converting section converts the color of the extracted outline into a predetermined color. Thus, an outlined character, a shaded character and the like can be formed (Kurita, Abstract). As can be seen from the above discussion, Kurita merely manipulates the received “input image data” to achieve the desired effects.

In contrast, in the Applicants’ invention, a second object, the “contour-drawing object,” is generated and separate positions are determined for the three-dimensional object and the contour-drawing object, so that the contour-drawing object is positioned behind the three-dimensional object when observed from a view point. As a consequence of two separate positions being determined for two separate objects, there may be areas in which the two objects overlap. These areas will need special consideration, such that the contour-drawing object is not placed in front of the three-dimensional object when observed from the view point. The Applicants respectfully would like to draw the Examiner’s attention to that this issue cannot occur in the event of a one-dimensional or two-dimensional object, such as the “input images” discussed in Kurita, and is therefore not even mentioned in Kurita.

In the Applicants’ invention, this issue is central and is solved, as described in claim 1, by “determining whether any portion of the contour-drawing object overlaps said three-dimensional

object when observed from the view point” and “drawing said three-dimensional object at said position thus determined and drawing said contour-drawing object in an optional contour color and at said determined position except for a portion of the contour-drawing object that overlaps said three-dimensional object when observed from the view point.”

For at least these reasons, it is respectfully submitted that neither San nor Kurita, alone or in combination, teach or suggest the Applicants’ invention, as defined by amended claim 1, and that the rejection of claim 1 should be withdrawn. Claims 2-7 all depend from claim 1, and are not anticipated by or obvious in view of the cited art, for at least the reasons discussed above with respect to claim 1. Claims 10-11, 14-15 and 19 were rejected under the same rationale as claim 1, and thus the rejection should be withdrawn for at least the reasons discussed above with regards to claim 1.

Claims 6-9, 12-13, 16-18 and 20-21 were rejected under 35 U.S.C § 103(a) as being unpatentable over San in view of Kurita, and further in view of Schaufler, “Image-Based Object Representation by Layered Impostors.” The Applicants respectfully traverse these rejections.

Claims 6 and 7 have been addressed above. Claims 8-9, 12-13, 16-18 and 20-21 contain similar features to the claims discussed above. Schaufler discloses an image based object representation that “stands out by the low number of images required, the projection method and the warping method applied to generate and use the images” (Schaufer, Abstract), and does not provide any further relevant information with regards to the features discussed above. Thus, for reasons substantially similar to those set forth above, the Applicants respectfully contend that the rejection of claims 6-9, 12-13, 16-18, and 20-21 is unsupported by the cited art and should be withdrawn.

Conclusion

The Applicants believe that all the rejections of the pending claims are unsupported by the cited art and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in

connection with the filing of this Amendment is to be charged to Deposit Account No. 50-0388
(Order No. SIP1P043).

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP

A handwritten signature in black ink, appearing to read "Fredrik Mollborn". The signature is written in a cursive, slightly stylized font.

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